

ABSTRACT OF THE DISCLOSURE

A method for performing a handoff on voice and packet data according to movement of a mobile station (MS) from a first base station (BS) to a second BS in a mobile communication system including the first BS communicating the voice and packet data with the MS, a mobile switching center (MSC) connected to the first BS, and the second BS adjacent to the first BS. The first BS sends a handoff required message to the MSC according to the movement of the MS to the second BS. The handoff required message includes a service type identifier indicating a concurrent service of the voice and packet data and a service configuration record. The MSC sends the service type identifier and the service configuration record in the received handoff required message to the second BS. The second BS determines whether it is possible to communicate with the MS using a radio resource specified in the service type identifier and the service configuration record, and sends, when it is not possible to communicate with the MS, to the MSC a new service type identifier and a new service configuration record indicating that it is possible to communicate one of the voice and packet data with the MS. The MSC sends the new service type identifier and the new service configuration record to the first BS, and then the first BS sends the new service type identifier and the new service configuration record to the MS. The MS then forms a communication link to the second BS according to the new service type identifier and the new service configuration record.